



• TIMBER IS A CROP which, when properly protected, GROWS. Like other crops, timber must be harvested at maturity before decadence.

With protection from fire, insects, and disease the 461,000,000 acres of America's commercial forest land will grow enough timber to meet all future domestic needs for forest products and will continue to provide a substantial supply available for export.

Forest land owners, large and small, in increasing numbers are keeping their forest lands productive. Many timber companies have long been operating on a sustained-yield basis. Each year increasing numbers are conducting their logging with view to continuous forest production.

American "Tree Farms" will provide an ample supply of forest products for both peace-time and national emergency requirements.

ids donce by the FOREST INDUSTRIES

for the ARMY

Barracks, laundries, portable bridges, hospitals, recreation centers, warehouses, laboratories, tent houses, chapels, operations offices, mess halls, hangars, airplanes, 'plane construction jigs, 'plane shipping crates, tank models, rifle stocks, packing boxes, ammunition boxes, and uncountable other items.

for the NAVY

Barracks, mess halls, recreation halls, class rooms, roof trusses, armories, flooring, office furniture, drafting boards, keel timbers, keel wedges, rams, trawlers, mine layers, mine sweepers, patrol boats, mosquito boats, Coast Guard cutters, life-saving boats, battleship decks, scaffolding, shipways, spar timbers.

for DEFENSE HOUSING

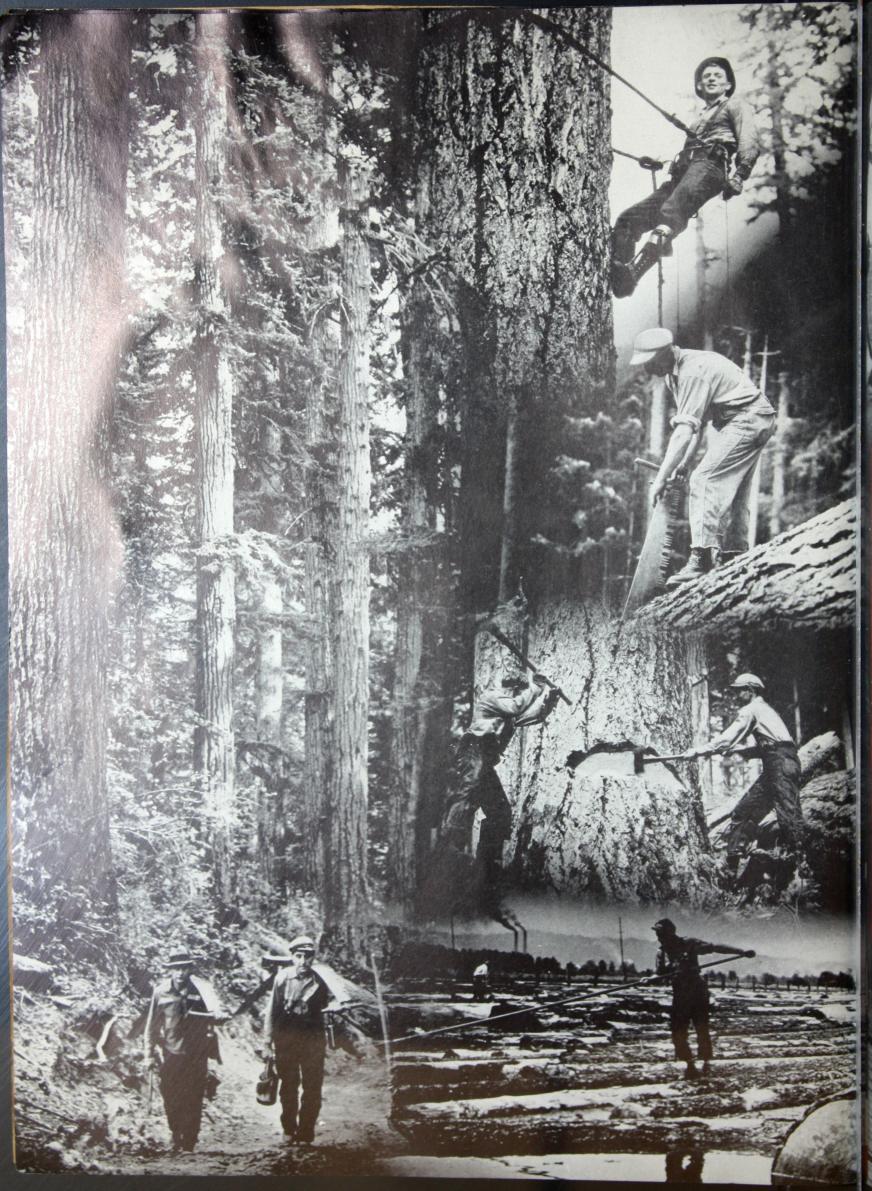
Prefabricated houses, comfortable homes for workers in defense industries, shelter for families evicted from land needed for military maneuvers, one-story, one-family houses; two-story, multiple family houses; housing for Navy Yard workers.

for DEFENSE INDUSTRIES

Drydocks, factories, mold lofts, assembly shops, shipyards, scaffolding, pile drivers, cargo vessels, warehouses, canneries, airplane factories, freight cars, ordnance plants.

for ALL INDUSTRY

Engineering services, churches, theatres, orchestra shells, piers, auditoriums, garages, steel racks, warehouses, oil derricks, tank towers, forest fire lookout towers, coal towers, cooling towers, barns, hangars, riding academies, roof trusses, skating rinks, railroad bridges, foot bridges, powder magazines, trestles, arches, concrete forms, factories.



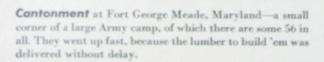


TROM great, timber-trussed warehouses to the stock of the buck private's rifle, the Army uses wood in almost every phase of its multitude of activities. Uncle Sam's greatest peace-time army lives, dry and comfortable, in wood barracks, mess halls, and hospitals which went up in phenomenal time as the "greatest carpentry job in history". Wood goes into the construction of Army 'planes, and they are sheltered in wood hangars. Ammunition is moved in wood boxes. Before a tank is built, a full-scale model is made of wood. Our Army must have wood.





"Biggest carpentry job in history" - Wood barracks in vari ous stages of construction at Selfridge Field, Michigan.



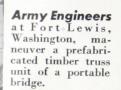
Two-story barracks under construction at Lowry Field, Denver, Col. "The Boys" are snugly housed in wood.



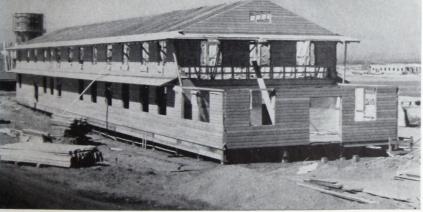
Loundry at Fort Lewis, Washington, framed in timber construction, on of the many jobs wood is doing for the Army.



Army Air Corps building project gets underway at Sunset Field, Spokane, Washington. Well-constructed, comfortable wood structures to house America's "Cavalry of the Skies" went up quickly, at minimum expense.



Army Photo



Army Photo

Standard barracks, simply designed and economically constructed of lumber at Camp Ord, California, by the Office of the Quartermaster General.



Hospital unit under construction, by U. S. Engineers, at Portland-Columbia Airport Cantonment, Portland, Oregon, for Army pursuit 'plane base.



Service club under construction at Camp Grant, Rockford, Illinois. Even though Army camps do not specialize in the aesthetic, note the interesting architecture simply executed in wood.



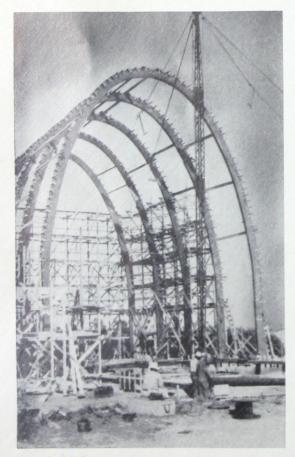
Warehouses under construction at Camp Shelby, Hattiesburg, Mississippi. Note the stout joisting of the floors to bear heavy loads. Wood is the structural medium employed here.



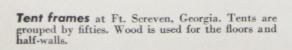


Army Signal Corps Photo

CCC Camp, Arlington, Virginia. This is the standard CCC design of construction that has housed 300,000 men. Variations of it have been applied with great success in prefabricated houses for civilians.

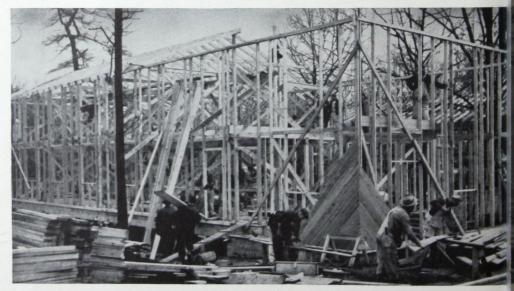


Testing laboratory being erected for the Signal Corps at Avon, Kentucky, by Unit Structures, Inc., of Peshtigo, Wisconsin. The timber arches for this structure rise 66 feet, span 50 feet, and are spaced 16 feet.





Camp Ord, Monterey County, California, being built by private contractors under the direction of the Office of the Quartermaster General. Note the permanent "awnings" over the windows, a standard feature of barrack design.



Carpenter's eye view of a barracks under construction at Ft. George Meade, Maryland Observe the sturdy, timber framing and the diagonal application of sheathing which gives the structure additional rigidity.

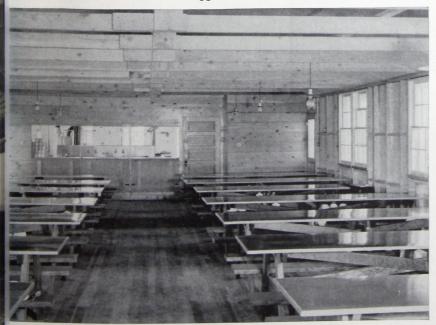




Chapel at Ft. Myer, Virginia. 604 of these all-wood, regimental chapels have been erected to serve Protestant, Catholic, and Jew. The architecture is typical of the small, wood churches found in many American communities.



CCC Camp nestled in the mountains of West Virginia. Construction of lumber-built encampments like these for civilian use gave the military much valuable information which it has applied to soldier housing.



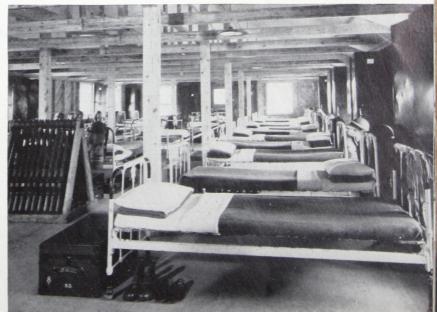
Mess hall at Camp McQuade, California, is clean, airy and cheerful. When a company of hungry soldiers charges in here from drill, the carnage among the beef and potatoes makes the kitchen police shudder. Tables and benches as well as the building, itself, are wood.



TECO Timber Connectors join the 37-foot trusses which support the roofs in most of the Army chapels. Each chapel has a seating capacity of 400 and some of the cantonments have as many as 15 or 20 chapels.

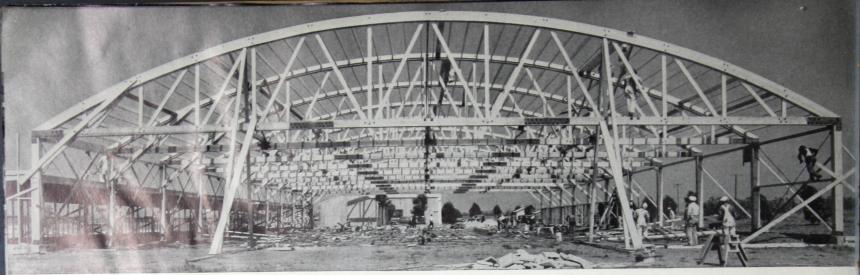


Operations office of an Air Corps training unit at Fort Lewis, Washington. The stenographers wear khaki and shave, but paper work at wood desks is as necessary to the Army as to any other complex organization.

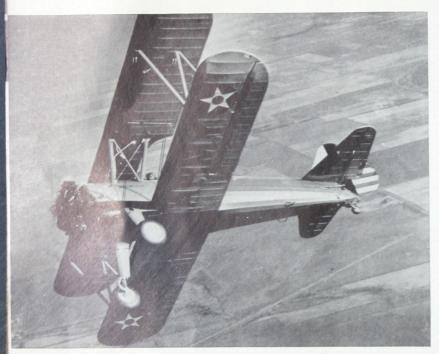


Army Signal Corps Photo

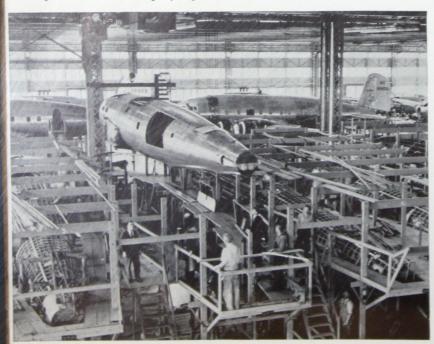
Snug as a bug in a rug, "the boys" sleep in wood barracks at Ft. Sheridan, Illinois. Contrary to rumor, the sergeant does not tuck 'em in at night. The head-to-foot arrangement of the bunks is to guard against spread of respiratory diseases.



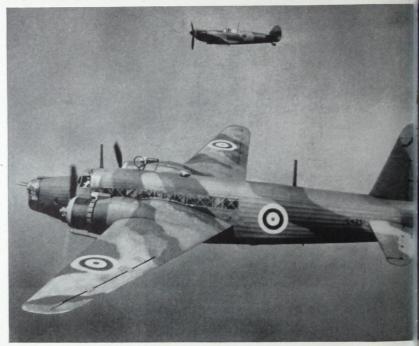
Air training bases at Tulare, Visalia, and King City, California; Glendale and Mesa, Arizona, and Oxnard, Ontario, have hangars of timber like this. Eleven trusses of 102-foot span each, spaced 20 feet apart, were built by Summerbell Roof Structures to support the roof over this 102 x 200-foot structure.



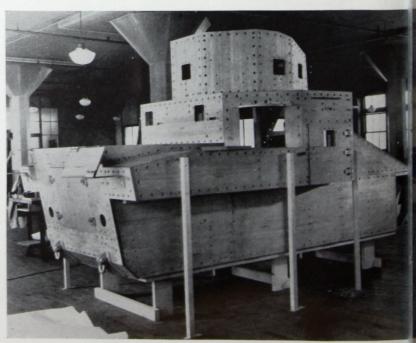
Cadet pilots of the Army and Navy air corps are learning to fly in ships like this Stearman PT-13B primary trainer, built by Boeing. Frames of the wings are of wood. One of these ships is being produced every three hours at present, and the company expects to double that rate soon.



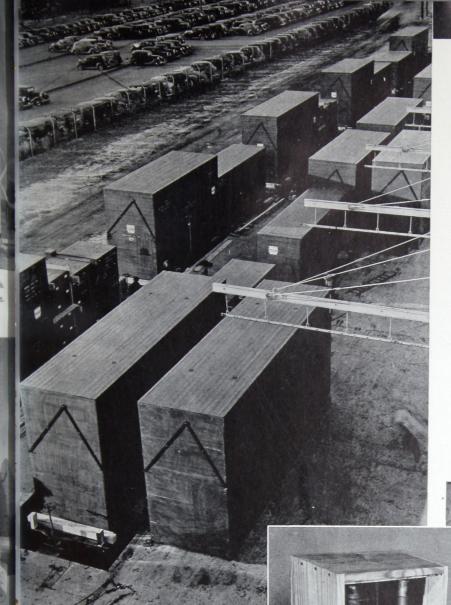
Birth of a "Flying Fortress." Out of its "cradle", the wood construction jig, goes the fuselage of one of the Army's new Boeing B-17Bs hoisted by an overhead crane which will take it to the final assembly floor.



Wellington Bomber off to pay a call on you know whom. They say "ol Wellington Bombers never die", but always get home to be patched up, an "rise to fight again". Possibly the wood used in their construction has som thing to do with that.



Tanks a million! This weird affair is a wood "mock-up" of a tank, constructed at the Chrysler Tank Arsenal as a model or pattern from which the real thing is built. Looks like something out of Buck Rogers!



Aircraft crates are almost "as big as a house". These 'planes, wrapped tenderly in wood, are leaving the Glenn L. Martin Company Baltimore plant for some undeclared destination. Note the doors in the end of each crate for inspection.

Shell boxes. These large sized eggs aren't BB shot; they demand respectful treatment. Wood cases protect them from accident and make for easy handling.



U. S. Army Signal Corps Photo

Garand Rifle stocks are made of choice woods, painstakingly hand finished by master craftsmen.



American Red Cross Photo

SURGCAL

DRESSIN

Red Cross supplies, surgical dressings and the like, are all packed in 13 x 16-inch, tongue and groove, nailed, wood boxes.



Ammunition moves in wood boxes. National Youth Administration woodworking shop, Philadelphia, at present employed in building 30 caliber ammunition boxes for Frankford Arsenal.



Shell Oil Company Photo

Lubricants and fuel oils for the mobile units are packed in strong, wood boxes, for their journey may be long and rough. Leakage would not only be costly, but dangerous.

for the NAVY

" TYOODEN SHIPS for iron men" springs first to mind, naturally, when one thinks about wood's service to the Navy and, make no mistake about it, wood ships are still an important arm of the service. Along the New England coast craftsmen sons of generations of Yankee shipbuilders are turning out wood cargo vessels, trawlers, mine layers, patrol boats, as fast as ever they can. On the Lakes and along the Gulf swarms of humming mosquito boats are hatching. Even metallic monsters like the U.S.S. North Carolina, seen here firing the mightiest broadside in naval history, need wood for their decks. As evidenced in the following pages, wood serves the Navy in an endless variety of important if less romantic ways.





Timbers cut during Civil War, recently dredged up at the Brooklyn Navy Yard and found in perfect condition, are being used in the process of building modern fighting ships, as keel wedges, and in wood auxiliary craft.

500 men can live in this huge, wood barrack at the Pensacola Florida, Naval Air Station. Mess and recreation halls and class rooms are all included in these large, single units which compare with the Army's 63-man barracks.



Timber roof trusses, prefabricated, are placed as a unit on this wood structure at the Opa-Locka Naval Air Base, Miami, Florida. Note the diagonal sheathing for increased rigidity.



Naval air base. Another view of the wood construction going up at Op Locka, Miami, Florida. Larger structures than those of the Army, these sho good architecture and skilful engineering.





Wood office furni-

Wood office furniture in the Office of Civilian Supply of the Office of Emergency Management, Washington, D. C. Defense officials follow their own precepts and use wood instead of critical list materials needed for actual fighting tools.

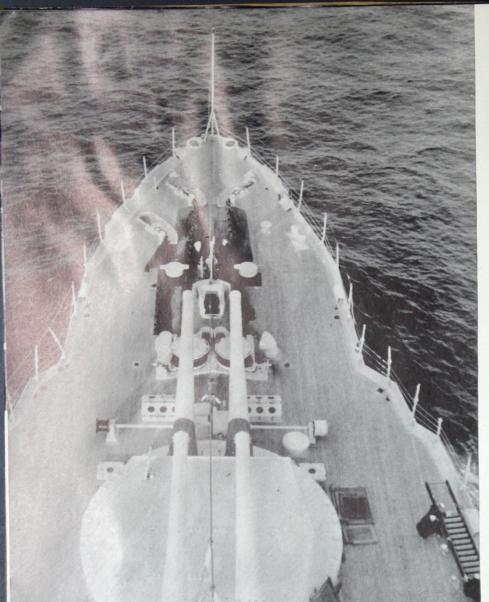
Drafting room of the Boeing Aircraft plant at Seattle, Washington. The drafting boards and furniture are wood.





By Ewing Galloway, N. Y.

Keel timbers, 110 feet long, on their way to the shipyard to become the backbones of all-wood trawlers, mine-layers or other naval auxiliary vessels.



Official U. S. Novy Photo Battlewagon—Foredeck of United States cruiser, a unit in the "two-ocean navy", as the captain sees it from the bridge. Even these floating metal forts need wood for their decks.



Official U. S. Navy Pho

Minesweeper—These tough, little craft, which chug about the touch-and-go business with few cheers, are made of wood.



U. S. Coast Guard Phot

Coast Guard Cutter—Fast, clean-cut, lightly armed, these wood built craft have been taken over by the Navy for patrol duty.



Laying the keel of the first of 25 new destroyers to be built a Seattle. The scaffolding and flooring of the shipways at the Seattle Tacoma Shipbuilding Corporation yard are lumber.

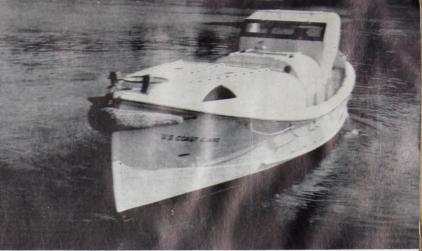


Spar timbers supplied to the Navy for use as derrick booms. These long, heavy, straight timbers are typical of the quality of *materiel* which the forest products industries are supplying, quickly and efficiently, to the armed forces of the nation.



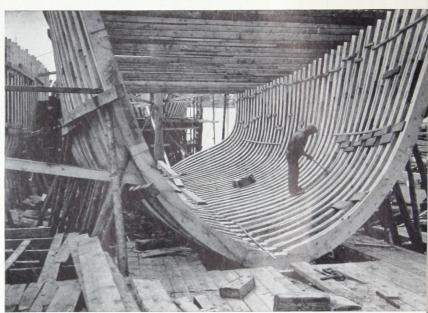


Trawler—Trim and clean as a hound's tooth, and brand new, an all-wood, naval auxiliary craft takes to the water without fanfare. Other hulls are on the stock ready to follow as fast as master shipbuilders can finish them.

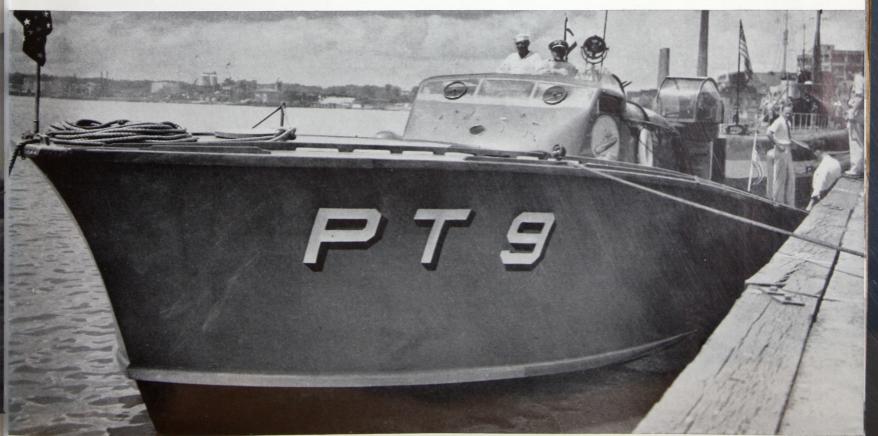


U. S. Coast Guard Photo

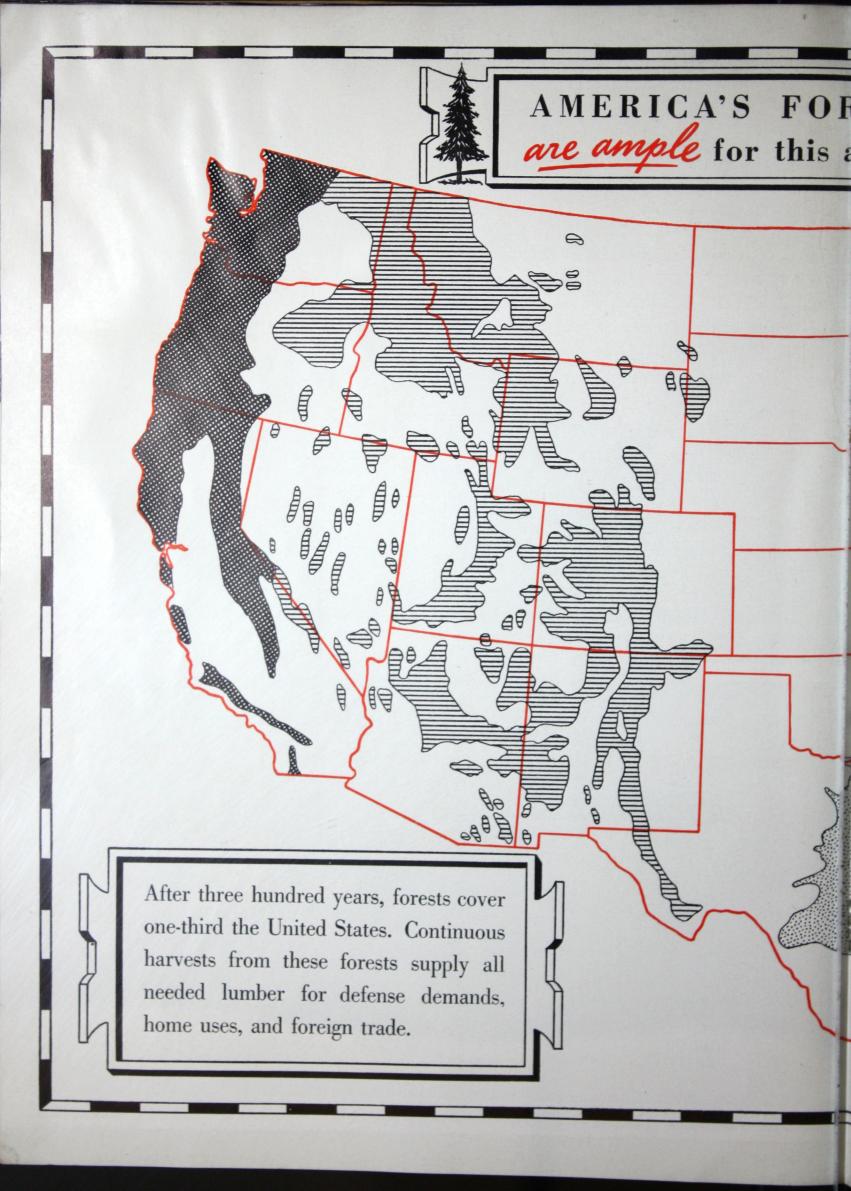
Practically non-sinkable and self-bailing, probably no boats in the world have to stand the punishment absorbed by the U. S. Coast Guard life-saving boats. This is the completion of the job you see at the left.



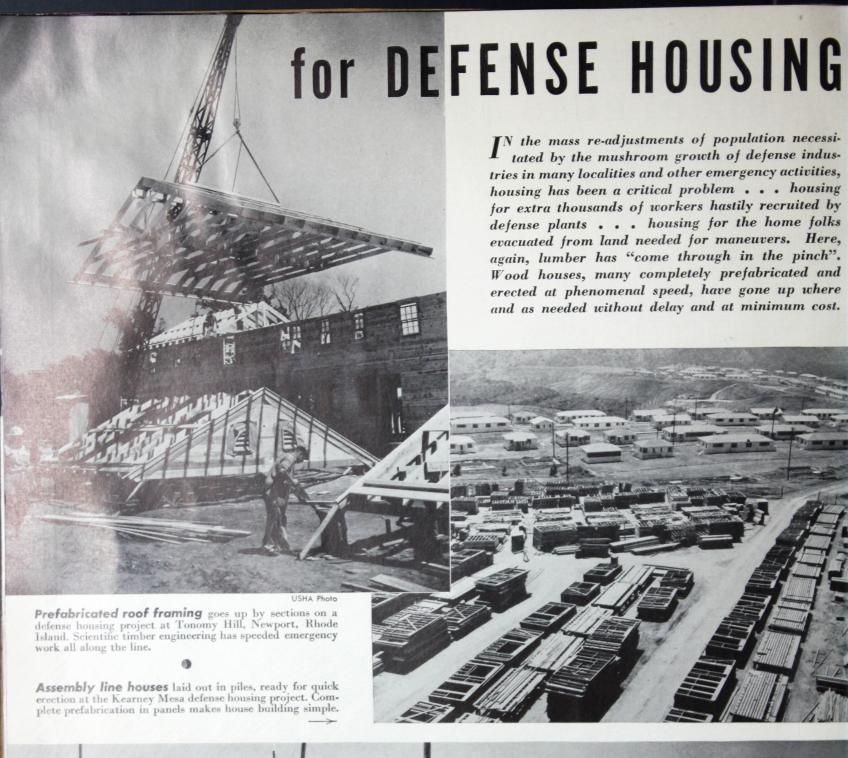
"Wooden Ships for Iron Men"-An old-time shipbuilder "dubthe ribs of a wood, naval auxiliary vessel with an adz, an implement he handles with the delicacy of a surgeon.



Mosquito boat tied up at the Washington Navy Yard. These small, high-powered boats are designed for swift "hit-and-run" operations against larger, enemy, surface craft. Wood-built, they are equipped with torpedo tubes and two machine guns.









USHA Photo

Clean, attractive, livable, these Cornodo Homes were erected at Dumas, Texas, by the U.S.H.A. to provide American-standard shelter for defense workers.



USHA Photo

Two-family homes in this defense housing project at Jacksonville, Florida, are designed with climate and environment in consideration.



USHA Photo

Two-story; multiple-family defense housing going up at Tonomy Hill, Newport, Rhode Island. These units are fabricated on the job.



Housing for Navy Yard workers—a glimpse of West Park, the two-and-a-half million dollar project at Bremerton, Washington.



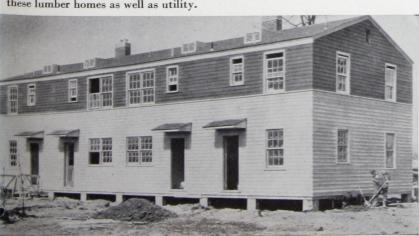
USHA Photo

Complete, lumber-built, defense housing project serving an industrial area at East Alton, Illinois.



USHA Photo

Modern design in two-family, one story homes built to house defense workers on the West Coast. Some thought has been given to appearance in these lumber homes as well as utility.



Four-family unit, one of 17,000 erected by Public Buildings Administration to house defense workers. Many structures in this program are four-room, single family units.



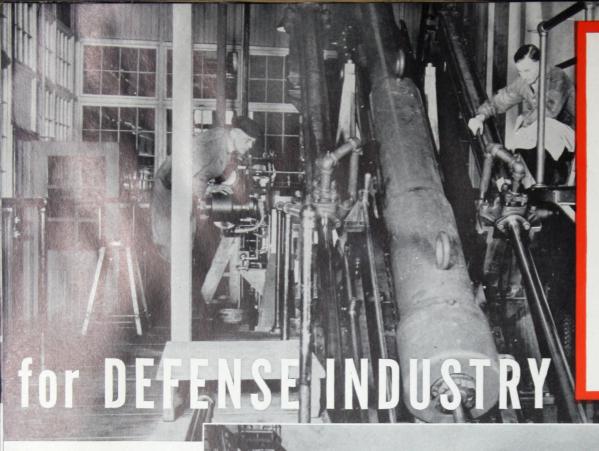
FSA Photo

"House-an-hour"—built for farmers evacuated from Caroline County, Virginia, when land was taken over for military purposes. Factory-fabricated one each 20 minutes; erected in little over an hour.



FSA Photo

Prefabricated house being completed for farmers who had to move out of the Camp Croft area in South Carolina. These houses were delivered to the site in complete panels, easily assembled.



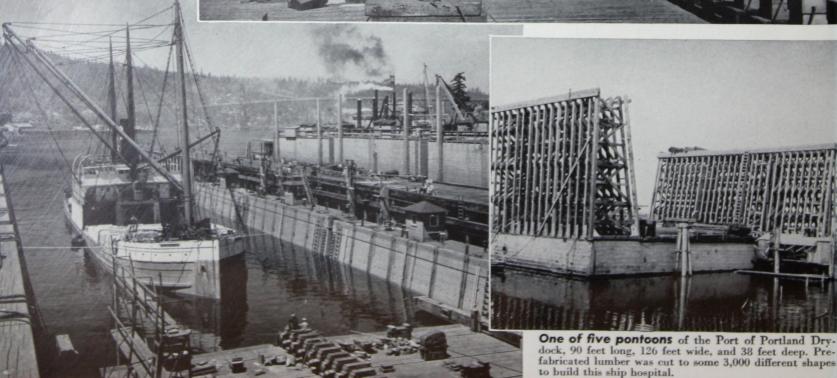
S HORTAGE of steel among the Central Powers during and immediately after World War I resulted in the invention of a system by which an older structural material . . . lumber . . . can do the kind of work previously expected only of steel. Now an emergency development of an old war seems to fit peculiarly well the widespread structural demands of preparations against a possible new one. America's abundance of timber, plus new commercial fabrication facilities developed since the inauguration of timber connector engineering, has facilitated rapid and economical production of all types of defense structures.

Photo by U. S. Army Signal Corps

Port of Portland Drydock, measuring 126 x 450 feet, took 1,250,000 board feet of lumber to build. All this timber was cut to size, prefabricated, and transported to the site on barges.

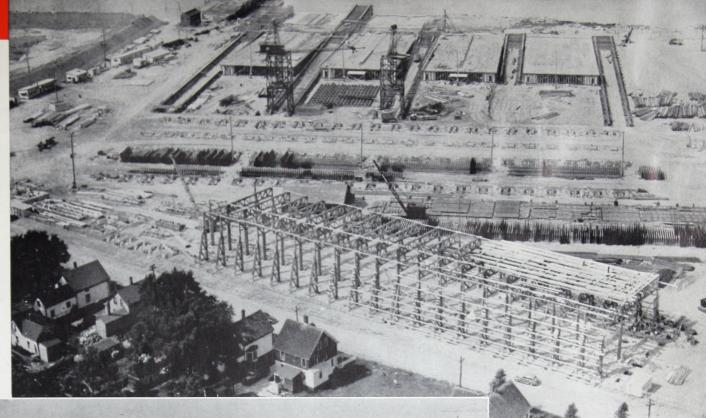
"Keep 'Em Floating'—
The Port of Portland Drydock is built in five sections, as many of which may be sunk as needed to accommodate the vessel under repair.





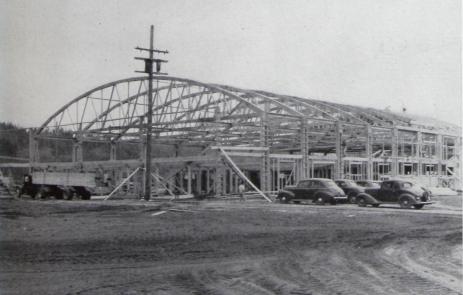
Assembly shop (for e-ground) of South Portland Shipbuilding Corporation, South Portland, Maine. All timber, this structure is 75 x 285 feet, and the roof is carried by TECO-fabricated trusses. Four ship ways are in the background.



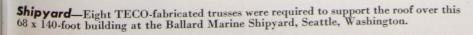




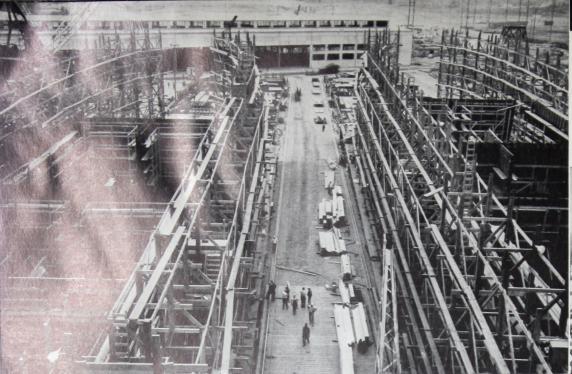
Factory of the Peninsula Plywood Company, Port Angeles, Washington. Ninety roof trusses of 64-foot span each and three of 42-foot span were prefabricated for this factory expansion.



Four 8-hour shifts of workmen erected this entire mold loft structure for the Oregon Shipbuilding Corporation, Portland, Oregon. It was designed, prefabricated, and erected by Timber Structures, Inc., Portland, Oregon.



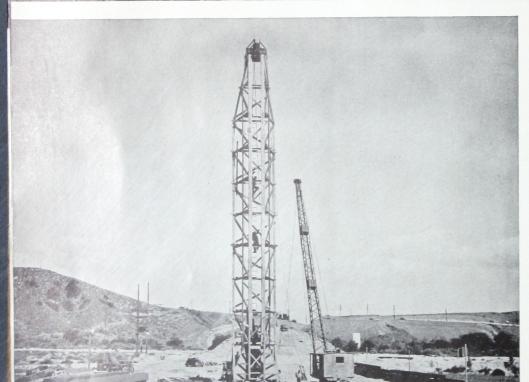




One end of the "Bridge of Ships". Two freighters take form in the ways. Although these ships are steel, it takes approximately 500,000 board feet of lumber to build each one.

Close-up of the bow of a steel freighter, giving some idea of the amount of lumber for needed scaffolding. Most of this wood is salvagable.

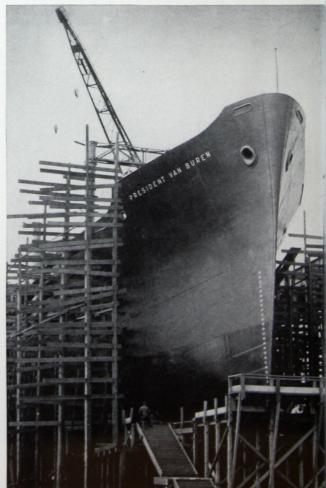




Pile-driver, 83 feet high, built in three sections by Summerbell Roof Structures, Los Angeles. TECO shear plates were used at all joints, permitting rapid assembly and dismantling with 100 percent salvage.



Mold loft of the Seattle-Tacoma Shipbuilding Corporation. The wood floor covers an area 130 x 260 feet. Timber trusses of 130-foot span, supplied by Timber Structures, Inc., Portland, Oregon., carry the roof over this great structure leaving the interior free of posts.



Cargo vessel emerges from its cocoon of wood scaffoldin at one of the 150 odd shipways that line our coasts (more arbuilding). It will soon be on its way.



Only 5½ hours were required to erect these fourteen 116-foot timber trusses on the new mold loft at the California Shipbuilding Company plant . . . one shift; no overtime. Prefabrication of these trusses was a contribution of Summerbell Roof Structures toward speeding up shipyard construction.



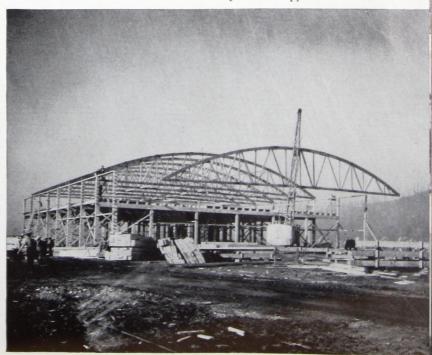
Seattle Shipyard of the Seattle-Tacoma Shipbuilding Corp., showing the mold loft and part of the assembly shop. These giant roof structures were erected in just over a month through improved timber prefabrication.



Delivered to the job complete in 6 working days after receipt of final lumber delivery, were these 21 eighty-foot span trusses for the mold loft of the Willamette Iron & Steel Corporation shipyard.

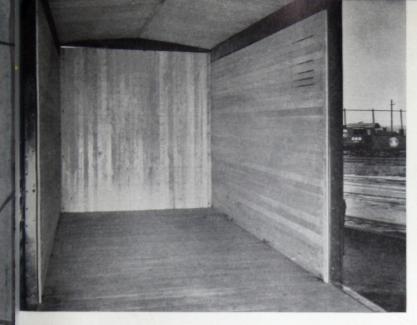


Shipyard mold loft of the Willamette Iron & Steel Corporation, Portland, Oregon, nearing completion in very fast time. TECO-connectored trusses, quickly framed and assembled, speeded up this emergency job.



3,000,000 board feet of lumber went into building the Tacoma shippard of the Seattle-Tacoma Shipbuilding Corporation. Here you see one of the 84 timber trusses being craned into place on the assembly shop.

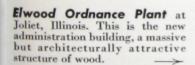






American Car & Foundry Co. Photo

Wood box car interior (upper) showing decking, wall sheathing, and plywood roof sheathing. The Great Northern Railroad has built or is building 2,000 of these new type, engineered, wood cars. The lower picture shows a side view of one of the cars.





Norfolk & Western R. R. Photo

Old box car being transformed into a stock car with lumber. In the shortage of critical list materials, railroads have found wood an ideal "substitute" and are using it extensively in place of materials once considered indispensable.



Photo by U. S. Army Signal Corps

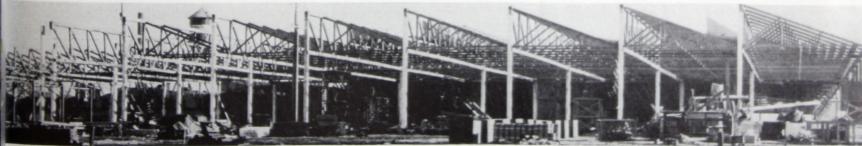


Photo by U. S. Army Signal Corps

'Plane factory of the Beech Aircraft Corporation, built of timber prefabricated at Portland, Oregon, and shipped to Wichita, Kansas, by rail.



Another view of the Beech Aircraft plant which gives a better conception of the size of the timber-built structure, covering an area of 8 acres.

for ALL INDUSTRY

In normal times, wood in some form is used to produce over 4,500 industrial items. In the present emergency, that figure is being increased, for wood is the ideal "substitute" for many critical list materials. Dealing in the most abundant, least costly, and most easily processed of all raw materials, the forest products industries have multiplied many times within the last few years their facilities for the production of fabricated, ready-to-use building parts. If you are having trouble with raw material supplies, consider wood.



Drafting room of Timber Structures, Inc., Portland, Oregon. Here specialists in timber engineering minutely plot great wood structures . . . a new service to timber users that is rapidly growing.



Zion Evangelical Lutheran Church at Leeds, Wisconsin. Four boomerang arches by Rilco Laminated Products, Inc., Albert Lea, Minnesota, support the roof of this 36 x 60 foot building.



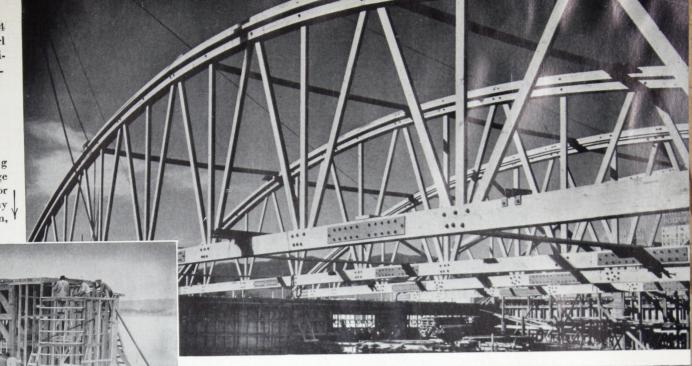
Tank tower rising 50 feet over Sunset Beach, California. Timber construction here supports a dead weight of 75,000 gallons of water. Constructed by Summerbell Roof Structures, Los Angeles.



Roman Catholic Church at Santa Ana, California. These six 38-foot, glue and laminated arches with TECO Connector-built frames are shown bein hoisted into place as single units.

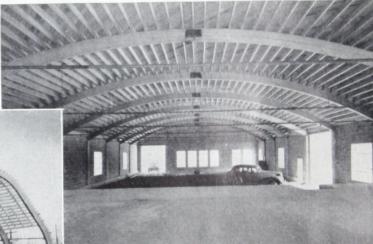
feet, 6 inches in span for the Earl Carroll Theater, Altadena, California.

Orchestra shell and dressing rooms being constructed on a barge in the Potomac River for outdoor concerts of the National Symphony at the Water Gate, Washington, D. C.





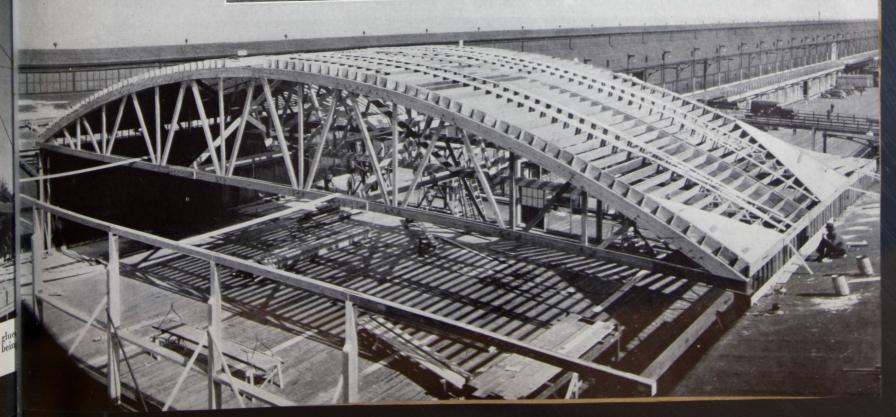
HIS GO! US

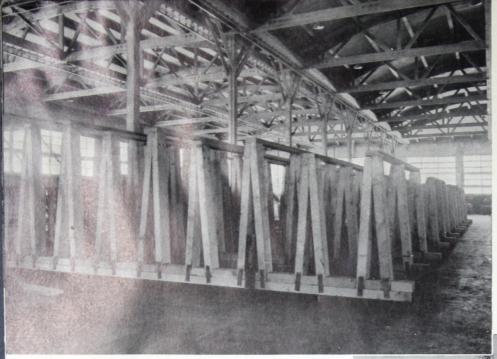


Passion Play auditorium, Zion, Illinois, Timber trusses, 80 feet in span and 45 feet high, by Unit Structures, Inc., Peshtigo, Wis.

Navy (Municipal) Pier, designed and built by McKeown Brothers Company, Chicago, for the Department of Public Works, City of Chicago. The timber trusses you see are 111 feet in span, built with TECO Timber Connectors.

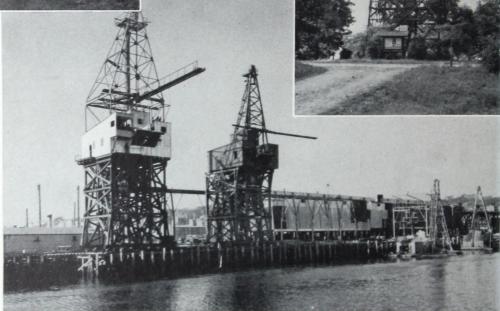
Garage, built for Joseph Bedner, Sun Prairie, Wisconsin. Eight Beam Arches by Rilco Laminated Products, Inc., Albert Lea, Minn., were used in this 58 x 135-foot structure.





Steel racks, fabricated for Woodbury & Company's steel warehouse, Portland, Oregon. These timber frames must stand up under a heavy load and grueling treatment. Observe, too, that wood trusses support the roof. port the roof.

Forest fire look-out tower at Bass Hill, Shawnee National Forest, Illinois. This 100-foot timber structure, of all-timber construction, is one of an ex-perimental series.



Coal Tower—Designed and built of timber for heavy work by the George P. Carver Engineering Company, Boston, Massachusetts, for the A. R. Wright Company, Portland, Maine.



Cattle barn in Multnomah County, Oregon. An interesting design of timber trusses support and braces the gambrel roof. Wood is the traditional building material of farmers, and they have never found a substitute as economical, workable, and durable.



Oil derrick—Prefabricated and demountable, this tall timber structure is 130 feet high. TECO Split Ring Connectors and shear plates were used in the joints.



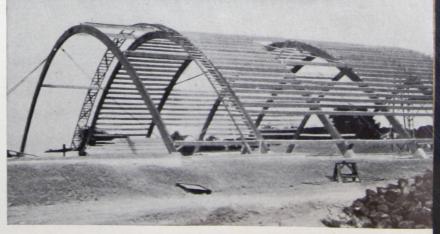


Outland Riding Academy, Birmingham, Michigan. Nine beam arches by Rilco Laminated Products, Inc., Albert Lea, Minnesota, with tierods were used in this structure.

Wood hangar at Municipal Airport, Walla Walla, Washington. Standard arch-rib timber trusses of 80-foot span support the roof.

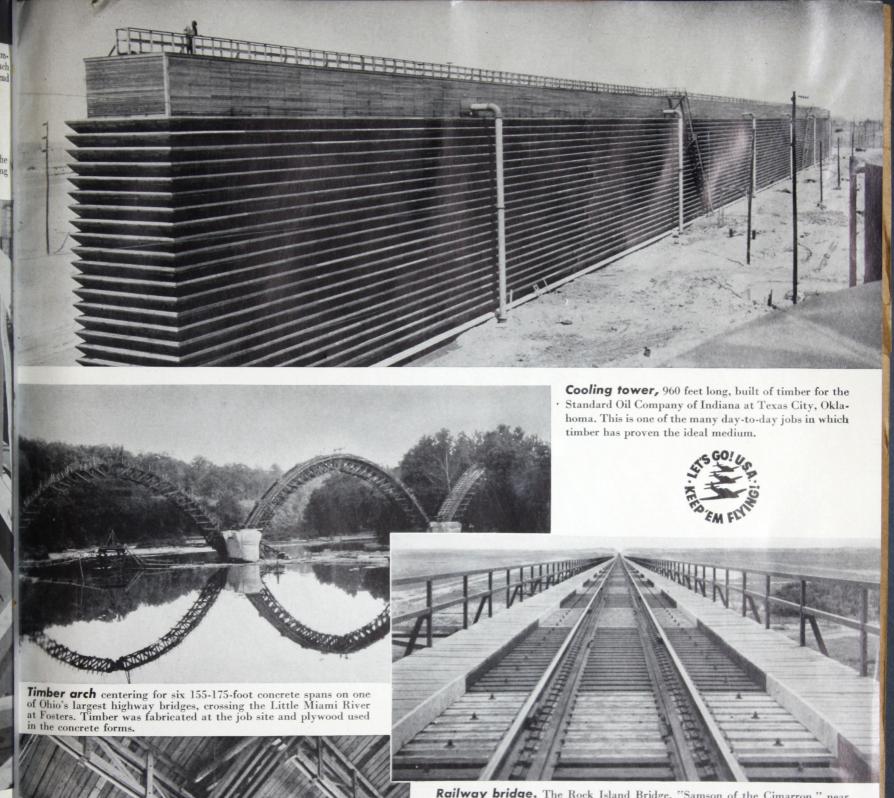


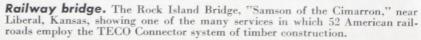
Prefabricated timber trusses, 60-foot bowstring units, fabricated by the TECO System, being trucked to the job site.

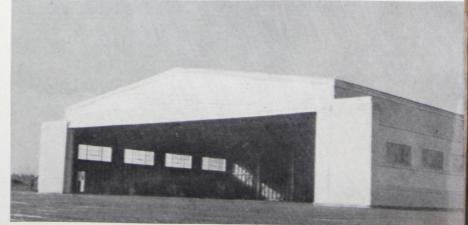


Roller skating rink at York, Pennsylvania. This interesting, parabolic arch construction has a span of 92 feet.









Hangar at Bar Harbor, Maine. TECO Split Ring Connectors were used in all joint connections of this 100 x 80-foot timber structure. The door opening is 96 feet wide and has an overhead clearance of 22 feet.

Plant for processing soya beans. Erected for the Dracket Company of Cincinnati, a variety of structural materials were used in this building, but timber-connector construction was relied on for the roof trusses.

